electronic records created in them. Retention of record functionality and integrity requires:

- (1) Retaining the records in a usable format until their authorized disposition date. Where migration includes conversion of records, ensure that the authorized disposition of the records can be implemented after conversion;
- (2) Any necessary conversion of storage media to provide compatibility with current hardware and software; and
- (3) Maintaining a link between records and their metadata through conversion or migration, including capture of all relevant associated metadata at the point of migration (for both the records and the migration process).
- (c) Ensure that migration strategies address non-active electronic records that are stored off-line.

Subpart C—Additional Requirements for Electronic Records

§ 1236.20 What are appropriate recordkeeping systems for electronic records?

- (a) General. Agencies must use electronic or paper recordkeeping systems or a combination of those systems, depending on their business needs, for managing their records. Transitory email may be managed as specified in §1236.22(c).
- (b) Electronic recordkeeping. Record-keeping functionality may be built into the electronic information system or records can be transferred to an electronic recordkeeping repository, such as a DoD-5015.2 STD-certified product. The following functionalities are necessary for electronic record-keeping:
- (1) Declare records. Assign unique identifiers to records.
- (2) Capture records. Import records from other sources, manually enter records into the system, or link records to other systems.
- (3) Organize records. Associate with an approved records schedule and disposition instruction.
- (4) Maintain records security. Prevent the unauthorized access, modification, or deletion of declared records, and en-

- sure that appropriate audit trails are in place to track use of the records.
- (5) Manage access and retrieval. Establish the appropriate rights for users to access the records and facilitate the search and retrieval of records.
- (6) Preserve records. Ensure that all records in the system are retrievable and usable for as long as needed to conduct agency business and to meet NARA-approved dispositions. Agencies must develop procedures to enable the migration of records and their associated metadata to new storage media or formats in order to avoid loss due to media decay or technology obsolescence.
- (7) Execute disposition. Identify and effect the transfer of permanent records to NARA based on approved records schedules. Identify and delete temporary records that are eligible for disposal. Apply records hold or freeze on disposition when required.
- (c) Backup systems. System and file backup processes and media do not provide the appropriate recordkeeping functionalities and must not be used as the agency electronic recordkeeping system.

§ 1236.22 What are the additional requirements for managing electronic mail records?

- (a) Agencies must issue instructions to staff on the following retention and management requirements for electronic mail records:
- (1) The names of sender and all addressee(s) and date the message was sent must be preserved for each electronic mail record in order for the context of the message to be understood. The agency may determine that other metadata is needed to meet agency business needs, e.g., receipt information.
- (2) Attachments to electronic mail messages that are an integral part of the record must be preserved as part of the electronic mail record or linked to the electronic mail record with other related records.
- (3) If the electronic mail system identifies users by codes or nicknames or identifies addressees only by the name of a distribution list, retain the intelligent or full names on directories or

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distributions lists to ensure identification of the sender and addressee(s) of messages that are records.

- (4) Some e-mail systems provide calendars and task lists for users. These may meet the definition of Federal record. Calendars that meet the definition of Federal records are to be managed in accordance with the provisions of GRS 23, Item 5.
- (5) Draft documents that are circulated on electronic mail systems may be records if they meet the criteria specified in 36 CFR 1222.10(b) of this subchapter.
- (b) Agencies that allow employees to send and receive official electronic mail messages using a system not operated by the agency must ensure that Federal records sent or received on such systems are preserved in the appropriate agency recordkeeping system.
- (c) Agencies may elect to manage electronic mail records with very short-term NARA-approved retention periods (transitory records with a very short-term retention period of 180 days or less as provided by GRS 23, Item 7, or by a NARA-approved agency records schedule) on the electronic mail system itself, without the need to copy the record to a paper or electronic recordkeeping system, provided that:
- (1) Users do not delete the messages before the expiration of the NARA-approved retention period, and
- (2) The system's automatic deletion rules ensure preservation of the records until the expiration of the NARA-approved retention period.
- (d) Except for those electronic mail records within the scope of paragraph (c) of this section:
- (1) Agencies must not use an electronic mail system to store the record-keeping copy of electronic mail messages identified as Federal records unless that system has all of the features specified in §1236.20(b) of this part.
- (2) If the electronic mail system is not designed to be a recordkeeping system, agencies must instruct staff on how to copy Federal records from the electronic mail system to a record-keeping system.
- (e) Agencies that retain permanent electronic mail records scheduled for transfer to the National Archives must

either store them in a format and on a medium that conforms to the requirements concerning transfer at 36 CFR part 1235 or maintain the ability to convert the records to the required format and medium at the time transfer is scheduled.

(f) Agencies that maintain paper recordkeeping systems must print and file their electronic mail records with the related transmission and receipt data specified by the agency's electronic mail instructions.

\$1236.24 What are the additional requirements for managing unstructured electronic records?

- (a) Agencies that manage unstructured electronic records electronically must ensure that the records are filed in a recordkeeping system that meets the requirements in §1236.10, except that transitory e-mail may be managed in accordance with §1236.22(c).
- (b) Agencies that maintain paper files as their recordkeeping systems must establish policies and issue instructions to staff to ensure that unstructured records are printed out for filing in a way that captures any pertinent hidden text (such as comment fields) or structural relationships (e.g., among worksheets in spreadsheets or other complex documents) required to meet agency business needs.

§ 1236.26 What actions must agencies take to maintain electronic information systems?

- (a) Agencies must maintain inventories of electronic information systems and review the systems periodically for conformance to established agency procedures, standards, and policies as part of the periodic reviews required by 44 U.S.C. 3506. The review should determine if the records have been properly identified and described, and if the schedule descriptions and retention periods reflect the current informational content and use. If not, agencies must submit an SF 115, Request for Records Disposition Authority, to NARA.
- (b) Agencies must maintain up-todate documentation about electronic information systems that is adequate to: